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Cultural Intelligence and Social Adaptability: A Comparison between Iranian and Non-Iranian Dormitory Students of Isfahan University of Medical Sciences

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ABSTRACT

Introduction: At the modern age, to acquire knowledge and experience, the individuals with their own specific culture have to enter contexts with cultural diversity, adapt to different cultures and have social interactions to be able to have effective inter-cultural relationships. To have such inter-cultural associations and satisfy individual needs in the society, cultural intelligence and social adaptability are deemed as inevitable requirements, in particular for those who enter a quite different culture. Hence, the present study tries to compare the cultural intelligence and its aspects and social adaptability in Iranian and non-Iranian dormitory students of Isfahan University of Medical Sciences in 2012. **Methodology:** The study was of descriptive-analytical nature. The research population consisted of Iranian and non-Iranian students resided in the dormitories of Isfahan University of Medical Sciences which are 2500, totally. For Iranian students, two-stage sampling method was adopted. At the first stage, classified sampling and at the second stage, systematic random sampling was conducted. In this way, 441 students were selected. To form non-Iranian students' sample, consensus sampling method was applied and a sample of 37 students were obtained. The research data was collected by using Earley & Ang's Cultural Intelligence Questionnaire with the Cronbach's coefficient α of 76% and California Social Adaptability Standard Questionnaire with the Cronbach's coefficient α of over 70%. Then, the data were put into SPSS software to be analyzed. Finally, the results were presented by descriptive and inferential statistics methods. **Results:** The study findings revealed that there was no statistically significant difference between cultural intelligence and cognitive aspect of cultural intelligence in Iranian and non-Iranian students ($P \geq 0.05$). However, Iranian and non-Iranian students statistically differed in terms of the following aspects of cultural intelligence: meta-cognitive aspect (61.8% for Iranian students vs. 47.6% for non-Iranians), motivational aspect (59.0% vs. 42.6%), behavioral aspect (31.8% vs. 41.2%) as well as social adaptability as the other variable in question (68.9% vs. 56.2%) ($p < 0.001$). **Conclusion:** The comparison of the mean scores gained for meta-cognitive and motivational aspects of cultural intelligence as well as social adaptability in Iranian and non-Iranian students resided in the dormitories of Isfahan University of Medical Sciences revealed that the Iranian students had the higher rank. On the other hand, the mean score acquired for the behavioral aspect in Iranian and non-Iranian students were comparable, with non-Iranian students having the higher mean scores. Therefore, it can be said that the meta-cognitive and motivational aspects of cultural intelligence and social adaptability of non-Iranian students and the behavioral aspect of Iranian students' cultural intelligence may be promoted by educational planning, thereby, taking effective steps towards their achievement in contexts with inter-cultural interaction. In this way, their mental health will be enhanced, as well.

Keywords: culture, intelligence, cultural intelligence, social adaptability.

1. INTRODUCTION

According to Gardner (1993), human intelligence is defined as a collection of problem solving abilities useful for achieving valuable results in a given culture or society (1). Intelligence encompasses several sub-categories so that enjoying just one sub-category does not lead to human achievement in all scientific, social and cultural fields. To put it differently, there are many people who despite having high logical/mathematical intelligence and social skills fail in their interactions (2), especially

when they enter the contexts with cultural diversity where being adaptable to various cultures and sub-cultures is an inevitable requirement. On the other hand, to meet his/her requirements, human being has to adapt to his surrounding environment (3). Meanwhile, social and cultural achievements depend on taking advantage from cultural intelligence and social adaptability.

Culture is an inter-related series of more or less clear-cut modes of thought, feeling and action acquisition of which makes people specific and distinguished (4). In various cultures and

even sub-cultures within a national culture, there are a wide array of feelings and emotions in such a way that language, nationality, policies differences and a vast number of other attributes may show up as potential conflict sources (5). Hence, inter-cultural contacts may lead to cultural shock or pressure, conflict and contrast challenges. This is more apparent where the new target cultural context is quite different from that of the source culture (6).

Cultural intelligence enables the individuals to represent appropriate behaviors in varied cultures without getting confused or distracted about how the others behave them. This can be justified by the fact that cultural intelligence is associated with adaptive behavior in new environments (7).

To put it differently, as Earley and Ang argue cultural intelligence is the acquisition of new patterns in cultural interactions and giving proper behavioral feedbacks to such patterns (8). According to them, cultural intelligence is composed of four aspects namely meta-cognitive, cognitive, motivational and behavioral. Meta-cognitive intelligence represents the individual's knowledge in his/her interactions with people of a different culture. While cognitive aspect of cultural intelligence is related to individual's recognition about specified norms, new methods and new cultural societies. Motivational intelligence signifies the individual's motivation and desire to promote his/her knowledge and act effectively in his/her interactions with people of different cultural backgrounds (9). Besides cultural intelligence, social adaptability plays a significant role in social interactions and, hence, mental health.

According to Mori (2000), immigrants face five sources of stress in the target society including language barriers, unawareness, financial problems, social conflicts and disorders. Social adaptability may act as a factor efficient for decreasing such challenges (10). In addition, various educational, personal and social tasks all make adaptability with the university and its associated requirements a main challenge for the students (11).

Wellman (1996) asserts that social adaptability is a reflection of one's interactions with others and his/her satisfaction towards own functions and performance quality all of which are under the influence of prior personality, culture and family expectations.

According to the researchers, there are various situations and factors affecting social adaptability the most important of which include family relationships, college (school) relationships, peer relationship, social skills, social functions, social relationships and antisocial behaviors (conflict) (13).

Adaptability is realized through learning. As Goodstein and Laynon argue, adaptability is a consistent process in which one's social learning experiences results in the manifestation of mental needs, providing the opportunity for the acquisition of capabilities and skills through which such needs may be met (14). On the other hand, acquired by formal and informal education, cultural intelligence is not of an intrinsic nature (15). Hence, the individual's cultural intelligence and social adaptability are researchable issues. In this way, those who are in a weak position can be identified, placing them on the top of education priorities list.

Prolific research has been conducted on cultural intelligence and social adaptability, both in Iran and other countries. Among them, the following studies can be enumerated: "Cultural Intelligence: A Necessity for Future Universities" (Baglarian et al

(16), "Investigating the Relation Between Motivation, Behavior and Cultural Intelligence Recognition with Cultural Shock" (Moshabak and Ramouz) (17), "The Effect of Cultural Intelligence Aspects on Judgment, Decision -making, Cultural Adaptability and Individual's Performance" (soon et al) (18), "The Effect of Cultural Diversity on Association Process and Performance" (Watson) (19), "The Effect of Education and Learning on Cultural Intelligence" (Earley & Mosakowski) (20), "Cultural Intelligence Understanding and Education Consequences in Inter-cultural Environment" (Danijelas) (21), "Adaptability with University" (Zaki) (22), "The Effect of Education on Adaptability" (Rahmati et al) (23), "Exploring the Social and Cultural Adaptability of the Iranian Immigrants to USA" (Ghasemi and Amiri) (24), "Cultural Intelligence: The Predictor of Challenges in Inter-cultural Challenges" (Ward et al) (9).

To the best of the researcher's knowledge, no similar study has been carried out on the comparison of the cultural intelligence and social adaptability among the Iranian and non-Iranian students both in Iran or abroad. Therefore, the present study aimed to compare the cultural intelligence and its constituent aspects and social intelligence in the Iranian and foreign students resided in the dormitories of the Isfahan University of Medical Sciences. It is hoped that the results of this study can be advantageous for the authorities in planning for increasing cultural intelligence and social adaptability of the Iranian and non-Iranian students and thereby promoting the students' mental health.

2. METHODOLOGY

The study was of descriptive-analytical nature. The research population consists of Iranian and non-Iranian students resided in the dormitories of Isfahan University of Medical Sciences which was 2500, in whole. The statistical sample in question included 37 non-Iranian and 410 Iranian students. For Iranian students, two-stage sampling method was adopted. At the first stage, classified sampling and at the second stage random systematic sampling was conducted. To form non-Iranian students' sample, consensus sampling method was applied. The research data was collected by a questionnaire. To assess the cultural intelligence, the localized Earley and Ang's Cultural Intelligence Questionnaire was applied.

This questionnaire assesses cultural intelligence in terms of four aspects namely meta-cognitive, cognitive, motivational and behavioral based on Likert-scale. To measure social adaptability, California's Standardized Social Adaptability Questionnaire was used which assesses family relationships, school relationships, peer relationships, social skills, social relationships and anti-social relationships. The validity of this questionnaire was affirmed referring to several expert professors' views. Cronbach's coefficient α calculated for the localized questionnaire found to be 0.76 (in Khani study, it was 0.92). Based on the review on the previous studies, it was found that the estimated Cronbach's coefficient α for California's Standardized Social Adaptability Questionnaire was 0.98 in Khodayarifard and et al study (26), 0.79 in Mazaheri and Afshari study (27) and 0.94 in Naderi's study (28). Accordingly, it was inferred that both questionnaires had the required reliability. In the next stage, the data were gathered and analyzed using SPSS software as well as descriptive and statistical tests.

3. RESULTS

Based on the findings of the study, the frequency percentage for the Iranian and non-Iranian students were 410 (91/7%) and 37 (8.3%), respectively. The frequency percentage of Iranian female student (no.247), non-Iranian female students (no. 5), male Iranian students (no. 347) and male non-Iranian students (no. 32) were found to be 60.4%, 13.5%, 39.6% and 86.5%, respectively. In the same vein, 84.9%, 97.3%, 15.1% and 2.7% were the estimated frequency percentages for Iranian single students (no. 347), non-Iranian single students (no. 36), Iranian married students (no. 207) and non-Iranian married students (no. 1), in terms of order. The frequency percentage gained for B.A. Iranian students was found to be 50.5% (no. 207) and that of B.A. non-Iranian students 10.8% (no. 4).

The frequency percentages obtained for Iranian (no. 203) and non-Iranian (no.33) students with education level higher than B.A. was 49.5% and 89.2%, respectively. As the results summarized in table 1 indicates, given the estimated mean scores (total score of 100), the mean scores for the cultural intelligence for all the students including Iranian and non-Iranian students was found to be up to 48.5%. Similarly, the mean scores calculated for different aspects of cultural intelligence were as follows: 60.5% for meta-cognitive aspect, 42.8% for cognitive aspect, 57.6% for motivational aspect and 32.7% for the behavioral aspect. Finally, the mean score gained for the social adaptability was found to be 67.7%.

Variables (Score)	Mean Score	Standard Deviation
Cultural Intelligence	48.5	11.6
Meta-cognitive Aspect	60.5	15.8
Cognitive Aspect	42.8	15.5
Motivational Aspect	57.6	16.9
Behavioral Aspect	32.7	20.0
Social Adaptability	67.7	11.7

Table 1. The Estimated Mean Scores for the Cultural Intelligence, different Aspects of Cultural Intelligence and Social Adaptability (from 100) of the Total Students (Iranian and Non-Iranian)

As the results given in table (2) show, the mean scores gained for cultural intelligence for Iranian and non-Iranian students were 48/9% and 45/5%, respectively.

The mean scores for meta-cognitive aspect was 61/8% and 47/6% for Iranian and non-Iranian students, respectively. The mean scores acquired for cognitive aspect was 42/3% for Iranian students and 49/8% for non-Iranian students. The mean scores calculated for motivational and behavioral aspects for Iranian students were 59/0% and 31.8% and for non-Iranian students 42.6% and 56.2%, respectively. At last, as for social adaptability, the mean scores for Iranian students and non-Iranian students were 68/9% and 56/2%, respectively.

In addition, independent test results indicated that there is no statistically significant difference between Iranian and non-Iranian students in terms of their level of cultural intelligence ($P \geq 0/05$) and the cognitive aspect as one of the aspects of cultural intelligence ($P \geq 0/05$). In contrast, statistically significant difference was observed between Iranian and non-Iranian students in terms of the following aspects of cultural intelligence: meta-cognitive aspect ($P \leq 0/001$), motivational aspect ($P \leq 0/001$), behavioral aspect ($P \leq 0/05$) and finally, social adaptability ($P \leq 0/001$).

Variable	Iranian		Non-Iranian		Level of Significance
	Mean Score	Standard Deviation	Mean Score	Standard Deviation	
Cultural Intelligence	48.9	1.5	45.5	12.4	0.093
Meta-cognitive Aspect	61.8	15.0	47.6	18.7	0.000
Cognitive Aspect	42.3	15.2	49.8	17.0	0.05
Motivational Aspect	59.0	16.1	42.6	19.5	0.000
Behavioral Aspect	31.8	20.2	41.2	15.5	0.006
Social Adaptability	68.9	11.1	56.2	11.0	0.000

Table 2. The Mean Scores Obtained for the Cultural Intelligence, its Aspects and Social Adaptability in terms of Iranian and non-Iranian Students

4. DISCUSSION

The results of the research indicated that the frequency percentage of the Iranian respondents was higher than that of non-Iranian ones which can be attributed to the higher number of the Iranian students in the universities. Due to the higher number of Iranian female students and non-Iranian male students, the frequency percentage of the Iranian female respondents was higher than the non-Iranian ones while the majority of the non-Iranian respondents were male students. As for single students, non-Iranian students enjoyed the higher frequency percentage. Living in their own culture, Iranian students have more opportunities for marriage and occupation. As far as level of education is concerned, it was found that the frequency percentage of B.A Iranian respondents was higher than the non-Iranian. In contrast, non-Iranian students at levels higher than B.A. enjoyed the higher frequency percentage compared to the Iranian students, since the majority of the students attending Iran universities are PhD students.

As for the mean scores for culture intelligence and its aspects and the social adaptability of all the respondents (both Iranian and non-Iranian), the data analysis indicated that the estimated mean scores (per percentage) for the cultural intelligence and social adaptability was close to average (%48/5) and over average (67/7%), respectively. Furthermore, the mean scores for meta-cognitive and motivational aspects and cognitive and behavioral aspects were more than average and less than average, respectively (i.e. 60.5%, 57.6%, 42.8% and 32.7%). These values elucidate the necessity of focusing on behavioral and cognitive aspects of cultural intelligence with the aim of strengthening of these two aspects in the students and thereby, their cultural intelligence.

The findings of the study also revealed that the mean scores obtained for Iranian students' and non-Iranian students' cultural intelligence is close to the average (48.9% and 45.5%). Hence, it appears critical to improve cultural intelligence both for Iranian and non-Iranian students. As for social adaptability, it was discovered that the mean scores for both the Iranian and non-Iranian students were more than the average i.e. 68.9% and 56.2%. The estimated mean score for meta-cognitive aspect was found to be above the average and below the average for Iranian (61.8%) and non-Iranian students (47.6%), respectively. The mean scores for cognitive and motivational aspects in Iranian students were less than and more than the average, respectively (42.3% and 59.0%). As for non-Iranian students, they were found to be close and lower than the average i.e. 49.8% and 42.6%. the mean score for the behavioral aspect was lower than the average for both the Iranian (41.2%) and non-Iranian students (31.8%). As it can be inferred from these results, more consideration must be given to

the meta-cognitive and motivational aspects of cultural intelligence in non-Iranian students on the one hand and cognitive and behavioral aspects in Iranian students. Promoting these aspects would result in timely decision-making when encountering unknown cultures, culture recognition, more willing to establish relationship with others and showing appropriate inter-cultural behaviors on the part of the students.

The results of independent t-test revealed that there was no statistically significant difference between the mean scores gained for cultural intelligence as well as cognitive aspect for Iranian and non-Iranian students, ($P \geq 0.05$), hence, they cannot be compared. However, Iranian and non-Iranian students showed statistically significant difference in terms of cognitive aspect ($P \leq 0.001$). Therefore, they can be compared. To put it differently, the mean score for meta-cognitive aspect in Iranian students (61.8%) was higher than that of non-Iranian students (47.6%). This can be justified by this fact that when facing foreign cultures, the individuals who live in their own culture can predict and judge better making more appropriate decisions about how to interact with others, in turn. The mean scores gained for motivational aspect in the Iranian and foreign students were statistically significant with Iranian students enjoying the higher score compared to non-Iranian students (59.0% vs. 42.6%). This can be attributed to the fact that when entering foreign and unfamiliar cultural contexts, the individuals first experience cultural shock affecting their desire to establish broad associations to a large extent. There was also statistically significance difference between the behavioral aspect in Iranian and non-Iranian students ($P \leq 0.05$). Hence, they can be compared. Compared to Iranian students, Non-Iranian students enjoyed the higher mean score in terms of behavioral aspect (41.2% vs. 31.8%). This result can be justified as follows: when individuals attend foreign cultural contexts, they make more efforts for establishing associations and affording their life, as a result, non-Iranian students try to learn Persian language and represent appropriate verbal and non-verbal behaviors in order to be accepted by the target culture. It is clear that Iranian students living in their own culture do not have such worries. The Iranian and non-Iranian students significantly differed in terms of social adaptability ($P \leq 0.001$) with the higher rank belonging to the Iranian students (68.9% vs. 56.2). Effective family, school and peer relationships are some parameters that lead to social adaptability. Establishing such relationships is difficult and challenging for the immigrants who are far from their family and friends. The other factors affecting social adaptability include social relationships, social skills and social functions being more accessible for those who live in their own culture. Given these facts, it is quite natural that Iranian students are of a higher social adaptability. Following the findings of the study, the researcher suggests that:

The methods most effective for teaching various aspects of cultural intelligence and social adaptability must be identified, providing the required interventions for promoting them.

Considering the results of the study, it can be argued that the reasons and factors affecting the aspects of cultural intelligence for which Iranian and non-Iranian students gained low ranks must be investigated. In addition, the solutions for their improvement must be surveyed through qualitative methodology.

By proper planning and management, the university authorities give the students the opportunity to get familiar with different cultures and subcultures and appropriate methods for having proper inter-cultural behaviors and effective social associations.

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